

CLAIMS:

1. A tufted carpet comprising loop pile or cut pile face yarns, at least one backing fabric, and an adhesive binder substantially free of inorganic and latex materials, the face yarns having a tuft bind of at least 3 pounds (1.36kg) and the loop pile face yarns having a fuzz resistance rating of 1 or better.
2. The tufted carpet of Claim 1 having a tuft bind of at least 6.25 pounds (2.83kg).
3. The tufted carpet of Claim 1 or Claim 2 in which the adhesive binder comprises a thermoplastic.
4. The tufted carpet of Claim 3 in which the thermoplastic has a melt flow rate at 190°C. of at least 30 grams per 10 minutes.
5. The tufted carpet of Claim 3 or Claim 4 in which the thermoplastic comprises a polymer selected from the group consisting of linear low density polyethylene, low density polyethylene, ethylene copolymers, high density polyethylene, propylene random copolymers, polyamides, metallocene polyethylenes and syndiotactic polypropylene.
6. The tufted carpet of any of Claims 3 to 5 in which the thermoplastic adhesive further comprises a functionalized polyolefin compatibilizer.
7. The tufted carpet of Claim 4 in which the adhesive binder is present in an amount less than about 12 ounces per square yard (407g/m²).
8. The tufted carpet of Claim 1 or Claim 2 in which the adhesive binder is provided in the form of an adhesive fabric.

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9. The tufted carpet of Claim 8 in which the adhesive fabric comprises a nonwoven fabric.

10. The tufted carpet of Claim 9 in which the adhesive fabric comprises a nonwoven fabric comprising substantially continuous filaments.

11. The tufted carpet of Claim 10 in which the nonwoven fabric comprises substantially continuous filaments which are self-bonded.

12. The tufted carpet of Claim 9 in which the nonwoven fabric is a fabric selected from the group consisting of spunbond, meltblown, and needlepunched nonwoven fabrics.

13. The tufted carpet of any preceding claim in which the face yarn, backing fabric, and adhesive binder each comprise a thermoplastic material.

14. The tufted carpet of Claim 13 in which the thermoplastic for the adhesive binder has a melting point at least 20°C. lower than the melting point of the thermoplastic of the backing fabric.

15. An improved carpet backing comprising a nonwoven adhesive fabric needled or thermally bonded to a supporting fabric.

16. The improved carpet backing of Claim 14 in which the supporting fabric is a woven fabric.

17. The improved carpet backing of Claim 14 or Claim 15 in which the adhesive fabric has a basis weight equal to or less than about 12 ounces per square yard (407g/m²).

18. The improved carpet backing of any of Claims 14 to 17 in which the adhesive fabric and supporting fabric are each made from a thermoplastic.

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19. The improved carpet backing of Claim 18 in which the thermoplastic of the adhesive fabric has a melting point at least 20°C. less than the melting point of the thermoplastic of the supporting fabric.

20. The improved carpet backing of any of Claims 15 to 19 in which the adhesive fabric comprises a nonwoven fabric comprising substantially continuous filaments.

21. The improved carpet backing of Claim 20 in which the adhesive fabric comprises a nonwoven fabric comprising substantially continuous filaments which are self-bonded.

22. The improved carpet backing of any of Claims 15 to 21 in which the adhesive fabric comprises a nonwoven fabric selected from the group consisting of spunbond, meltblown, and needlepunched nonwoven fabrics.

23. The improved carpet backing of any of Claims 15 to 22 in which the supporting fabric and the adhesive fabric are point bonded to one another.

24. The improved carpet backing of any of Claims 15 to 22 in which the supporting fabric and the adhesive fabric are thermally calendered to one another.

25. The improved carpet backing of any of Claims 15 to 22 in which the supporting fabric and the adhesive fabric are needled to one another.

26. A process for making tufted carpet comprising:

tufting a primary backing fabric with face yarn;

contacting the tufted primary backing fabric with an adhesive fabric;

melting the adhesive fabric; and

applying force to the melted adhesive fabric while in contact with the tufted primary backing.

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37. The process of Claim 35 in which the nonwoven fabric comprises substantially continuous self-bonded filaments.

38. The process of Claim 35 in which the nonwoven fabric is selected from the group consisting of spunbond, meltblown, and needlepunched nonwoven fabrics.

39. A process for making tufted carpet comprising:
contacting a primary backing fabric with an adhesive fabric;
tufting the primary backing fabric and adhesive fabric with face yarn;
melting the adhesive fabric; and
applying force to the melted adhesive fabric while in contact with the tufted primary backing.

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